## **WE CLAIM AS OUR INVENTION:**

1. A method for positioning a patient in a medical device comprising the steps of:

obtaining an image of an exterior of a patient disposed on a patient bed that is movable in at least one plane relative to a medical device, said medical device having an associated coordinate system;

displaying said image on a display screen;

via a calculating unit connected to said display screen, in which a spatial correlation between the coordinate system of the medical device and said image is known, causing a target marking, spatially coupled with said coordinate system of said medical device, to be superimposed on said image on said display screen; and

remotely controlling movement of said patient bed through said calculating unit to bring a predetermined body region of the patient in the image on the display screen into a desired spatial correlation with said target marking on said display screen.

- 2. A method as claimed in claim 1 wherein said medical device has a scan region, and comprising using an image of said scan region of said medical device as said target marking.
- 3. A method as claimed in claim 1 comprising employing a symbol selected from the group consisting of a target symbol and a cross-hair symbol as said target marking.
- 4. A method as claimed in claim 1 wherein said medical device has a rotational center, and employing a designation of said rotational center as said target marking.

- 5. A method as claimed in claim 1 comprising obtaining and displaying at least two images of the exterior of the patient respectively obtained relative to recording axes that are independent of each other and viewing said at least two images simultaneously with said target marking superimposed thereon.
- 6. A method as claimed in claim 5 comprising obtaining said at least two images along respective recording axes that are orthogonal to each other.
- 7. A method as claimed in claim 5 wherein said patient bed is movable in a plurality of planes and, for each plane, acquiring an image of the exterior of the patient along a recording axis perpendicular to that plane.
- 8. A method as claimed in claim 1 comprising remotely controlling movement of the patient bed through said calculating unit using a manually operable input device connected to said calculating unit.
- 9. A method as claimed in claim 1 comprising manually entering, into said calculating unit, a designation of a body region of the patient to be examined and automatically generating, in said calculating unit, said target marking to designate said body region.
- 10. A method as claimed in claim 1 comprising obtaining at least two images of the exterior of the patient along respective image acquisition axes that are independent of each other, displaying each of said images, and superimposing different target markings in the displayed images.
- 11. A method as claimed in claim 1 comprising manually entering, through said calculating unit, a selected final position of said target marking on said display screen relative to said image on said display screen, and automatically controlling movement of said patient bed, through said calculating unit, to bring said patient on said patient bed to said final position.

- 12. An arrangement for positioning a patient in a medical device comprising the steps of:
  - a patient bed, adapted to receive a patient thereon, that is movable in at least one plane relative to a medical device, said medical device having an associated coordinate system;
  - an image recording device for obtaining an image of an exterior of the patient on the bed;
  - a display screen on which said image is displayed;
  - a calculating unit connected to said display screen, in which a spatial correlation between the coordinate system of the medical device and said image is known, which superimposes a target marking, spatially coupled with said coordinate system of said medical device, on said image on said display screen; and
  - a remote controller for remotely controlling movement of said patient bed through said calculating unit to bring a predetermined body region of the patient in the image on the display screen into a desired spatial correlation with said target marking on said display screen.
- 13. An arrangement for positioning a patient as claimed in claim 12 wherein said medical device has a scan region, and wherein said calculating unit superimposes an image of said scan region of said medical device on said display screen as said target marking.
- 14. An arrangement for positioning a patient as claimed in claim 12 wherein said calculating unit superimposes a symbol selected from the group consisting of a target symbol and a cross-hair symbol on said display screen as said target marking.

- 15. An arrangement for positioning a patient as claimed in claim 12 wherein said medical device has a rotational center, and employing a designation of said rotational center as said target marking.
- Mherein said image recording device is a first image recording device and wherein said image is a first image, and wherein said arrangement comprises a second image recording device for obtaining a second image of the exterior of the patient on the bed relative to a recording axis that is independent of a recording axis of said first image recording device, and wherein a spatial correlation between the coordinate system of the medical device and said second image is known in said calculating unit, and wherein said calculating unit superimposes said target marking in said first and second images, which are simultaneously displayed on said display screen.
- 17. An arrangement for positioning a patient as claimed in claim 16 wherein said first and second image acquisition devices have respective recording axes that are orthogonal to each other.
- 18. An arrangement for positioning a patient as claimed in claim 12 wherein said patient bed is movable in a plurality of planes, and wherein said arrangement comprises, for each plane, an image recording device for recording an image of the exterior of the patient along a recording axis perpendicular to that plane, and wherein a spatial correlation between the coordinate system of the medical device and each of said images is known in said calculating unit, and wherein said calculating unit superimposes said target marking in each of said images on said display screen.
- 19. An arrangement for positioning a patient as claimed in claim 12 wherein said remote controller comprises a manually operable input device

connected to said calculating unit for remotely controlling movement of the patient bed through said control unit.

- 20. An arrangement for positioning a patient as claimed in claim 12 comprising an input unit for allowing manual entry, into said calculating unit, of a designation of a body region of the patient to be examined and wherein said calculating unit automatically generates said target marking to designate said body region.
- 21. An arrangement for positioning a patient as claimed in claim 12 wherein said image acquisition device is a first image acquisition device and wherein said image is a first image, and wherein said arrangement comprises a second image acquisition devices for obtaining a second image of the exterior of the patient, said second image being displayed on said display screen, and wherein a spatial correlation between the coordinate system of the medical device and said second image is known in said calculating unit, and wherein said calculating unit superimposes respectively different target markings, spatially coupled with said coordinate system of said medical device, on said first and second images on said display screen.
- 22. An arrangement for positioning a patient as claimed in claim 12 comprising an input unit allowing manual entry, through said calculating unit, of a selected final position of said target marking on said display screen relative to said image on said display screen, and wherein said calculating unit comprises said remote controller and automatically controls movement of said patient bed, to bring said patient on said patient bed to said final position.